



301 16TH ST, CANYON, TX – (806)655-5014

ROOFING PROJECT MINIMUM REQUIREMENTS

- Permits are required for all roofing projects, and permits are \$50.00.
- Construction Card must be displayed and visible from street.
- Drip Edge 2 inches onto roof is required on all asphalt shingled roofing projects.
- Single station Carbon Monoxide alarms are required in existing dwellings that have attached garages or in existing dwellings which fuel – fired appliances exist.
- Proper attic ventilation: 1/150th ventilation of the area of the vented space requiring ventilation. (ex – 1800 sq ft of attic area requires a minimum of 12 sq ft of ventilation) Ventilation may be reduced to 1/300th when an equal amount of soffit and upper ventilation exists. (1 turtle vent for every 300 sq ft of roof area)
- New roof coverings shall not be installed without first removing all existing layer of roof coverings. (see exceptions for complete and separate metal roofing systems 2015 IRC)
- Damaged, rusted, or deteriorated roof vents and flashings shall be replaced.
- Chimney crickets and flashing are required on all chimneys greater than 30 inches in width.
- Proper termination for all exhaust vents penetrating through roof:
 - Exhaust vents shall have dampers and screen (clothes dryer vents shall be without screen).
 - Fuel fired appliances shall have approved/listed termination caps as required by manufacturer.
- Wood shakes and shingles shall only be used on solid sheathing. (R905.8, as amended)
- Wood shakes and shingles material will be a minimum Grade 1 as graded per the Cedar Shake and Shingle Bureau.
- Roofs shall be sloped as required for drainage unless designed for water accumulation.
- Any person or business performing contracting work within the city limits IS required to register as a contractor.
- Inspection personnel will be on patrol for unregistered/unlicensed individuals performing work without permits.
- This is a partial list of requirements. For more in-depth info please consult the 2015 IRC and IBC.

layment. Commentary Figure R905.2.2(1) shows an example of asphalt roof shingles installed on a high-slope roof (4:12 minimum), while Commentary Figure R905.2.2(2) depicts a low-slope roof installation (between 2:12 and 4:12).

R905.2.3 Underlayment. Unless otherwise noted, required underlayment shall conform to ASTM D 226 Type I, ASTM D 4869 Type I, or ASTM D 6757.

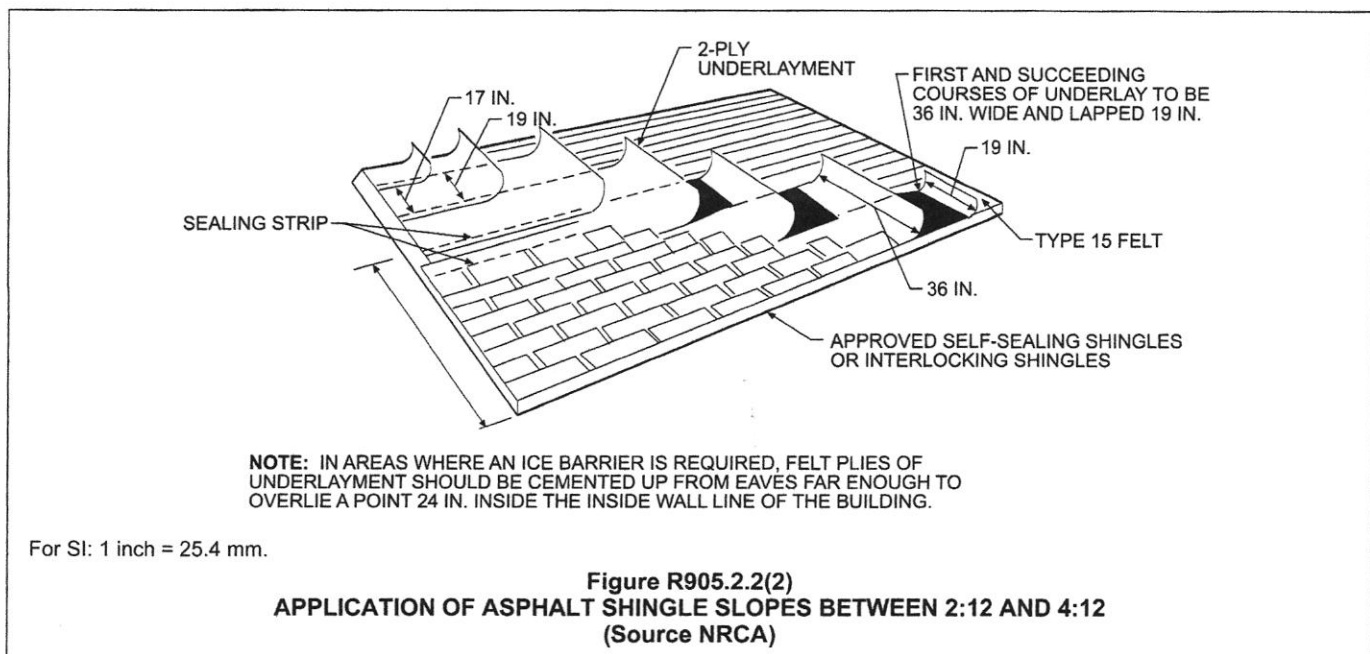
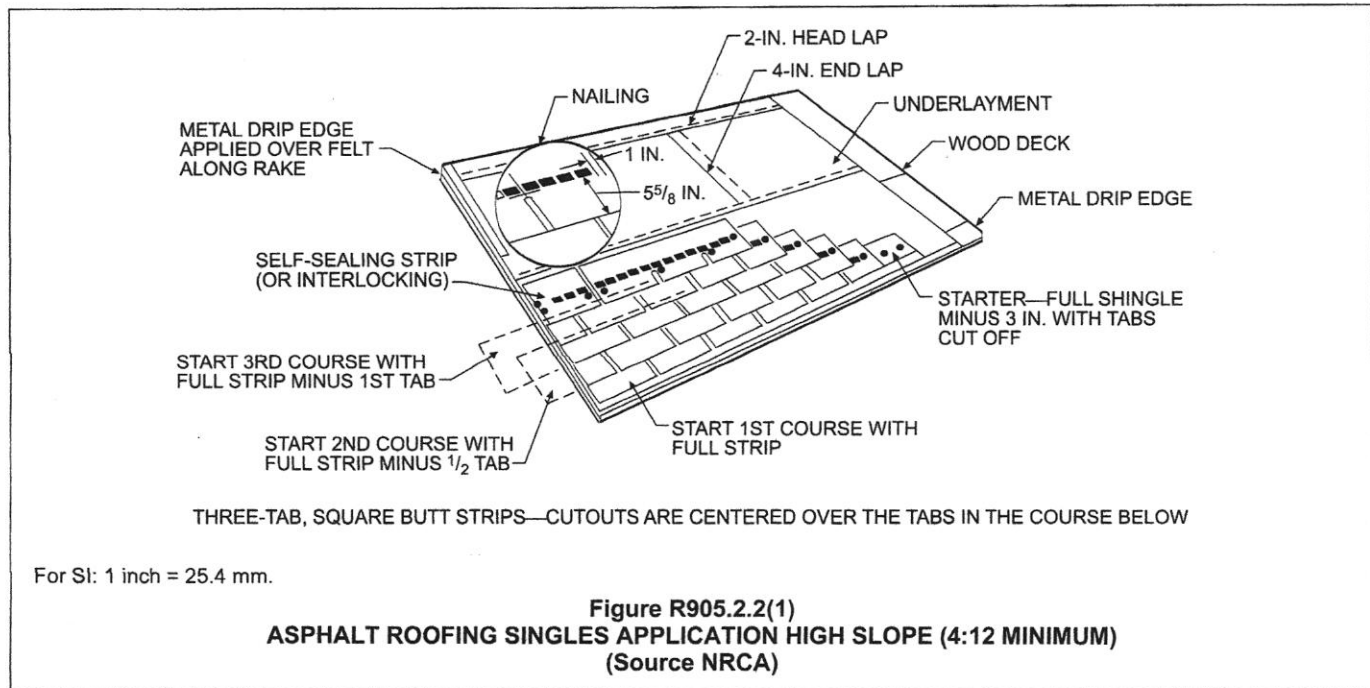
Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970.

❖ Four types of underlayment are recognized for use with asphalt shingle roof coverings: asphalt-saturated

organic felts as regulated by ASTM D 226, Type I; asphalt-saturated organic felt shingles, per ASTM D 4869, Type I; inorganic underlayment for use with steep slope roof, per ASTM D 6757; and self-adhering polymer modified bitumen sheet materials are addressed in ASTM D 1970. Section R905.2.7 contains the methods prescribed for the installation of underlayment for asphalt shingles.

R905.2.4 Asphalt shingles. Asphalt shingles shall comply with ASTM D 225 or D 3462.

❖ Two test standards regulate asphalt shingles. ASTM D 225 addresses asphalt shingles made from organic





Residential Re-Roof INSPECTION CHECKLIST

November 2016
This checklist is intended for use to prepare for an inspection. References are to the 2015 International Residential Code as amended by the City of Canyon

Please verify the following before calling for the re-roof inspection.

Inspections

- ✓ Access to interior of structure, attic area and roof.
- ✓ Inspector may perform as many as 2-3 site inspections for re-roofs; it may include decking inspection, nailing or progress inspection and final. (R109.1.5)

Deck-inspection

- After the removal of all existing roofing material and underlayment & prior to re-covering.
- Prior to installing roof coverings on all roofs having a slope of 2:12 or less.
- Prior to the installation of a separate roofing system over an existing roofing.

Nailing or Progress Inspection

- Where the existing roofing material is being completely removed and replaced, and the underlying sheathing is being replaced or added over existing 1x material, a nailing inspection may be required prior to any roofing materials being installed.

Final Inspection

- Final inspection when all work is complete; CO alarms installed as required; Access to attic to verify fuel fired appliance vent is intact.

Permits and Plans

- Permits required for residential re-roofing. (overlays are prohibited R908.3 as amended)
- Permits and approved plans required for residential re-roof involving structural elements including but not limited to, additions or modifications, roof sheathing, skylights, change of roof pitch, addition or relocation of mechanical units or installation of heavier materials than were previously installed.
- Job address is posted in a visible location. (R319)
- Permit and approved plans (when required) are on site and accessible to the inspector.

General Re-Roof Requirements

- New roof coverings shall not be installed without first removing all existing layers of roof coverings when any of the following conditions exist: (see exceptions 2015 IRC)
 - 1) The existing roofing is water soaked or is degraded to such a point that it cannot provide an acceptable base to the additional roofing.
 - 2) Where the existing roof covering is wood shake, slate, clay, or cement tile.
 - 3) Where the existing roof has 2 or more applications. (R908.3 See also exceptions)
 - 4) For asphalt shingles, when the structure is located in an area subject to moderate or severe hail.
- When the application of new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface is to be covered with gypsum board, mineral fiber, glass fiber or other approved material and securely fastened in place. (R908.4)
- Flashings must be reconstructed in accordance with approved manufacturer's installation instructions. (R908.6).

- Structural framework must be capable of supporting additional dead loads. (Pre-inspection required for structural rafter/truss dimensions and spans.) (R908.2)
- Contact the City of Canyon if there are questions regarding complete and separate roofing systems.
- Wood shakes and shingles shall only be used on solid sheathing. (R905.7.1, as amended)
- Wood shakes and shingles materials will be a minimum Grade 1 per the Cedar Shake and Shingle Bureau.
- Appliance and roof vents must be approved and listed for the use. "Texas Pattern Roof Vents" are not approved.

Roof Slope

- Minimum 2 in 12 for asphalt shingles. Roof slopes between 2 in 12 and up to 4 in 12 require double underlayment as detailed in section R905.2.3. See installation requirements of manufacturer and IRC. (R905.2)
- Minimum 2 ½ in 12 for clay and concrete tiles. Roof slopes between 2 ½ and 12 and up to 4 in 12 require double underlayment as detailing in section 905.3.3. See special installation requirements of manufacturer and IRC. (R905.3)
- Minimum 3 in 12 for metal roof shingles see special installation requirements of manufacturer and IRC. (R905.4)
- Minimum 1 in 12 for mineral surfaced rolled roofing. See special installation requirements of manufacturer and IRC. (R905.5)
- Minimum 4 in 12 for slate and slate-type shingles. See special installation requirements of manufacturer and IRC. (R905.6)
- Minimum 3 in 12 for wood shingles. See special installation requirements of manufacturer and IRC. (R905.7)
- Minimum 3 in 12 for wood shakes. See special installation requirements of manufacturer and IRC. (R905.8)
- Minimum ¼ in 12 for built up roofing. See special installation requirements of manufacturer and IRC. (R905.9)
- Minimum 3 in 12 for lapped non-soldered non-sealed metal roof panels. See special installation requirements of manufacturer and IRC. (R905.10)
- Minimum ¼ in 12 for standing-seam roof systems. See special installation requirements of manufacturer and IRC. (R905.10)
- Minimum ¼ in 12 for modified bitumen roofing. See special installation requirements of manufacturer and IRC. (R905.11)
- See sections R905.12 - R905.16 for other types of roofing applications.

Roof Drainage

- Roofs shall be sloped as required for drainage unless designed for water accumulation. (R905.1)
- Unless sloped to drain over roof edges, roof drains are installed at each low point of the roof. Roof drains size and discharged per the International Plumbing Code.
- Overflow drains sized the same as the roof drains and installed with the inlet line 2" above the low point of the roof, or overflow scuppers having three times the size of the roof drains and having minimum opening height of 4" installed in the adjacent parapet walls with the inlet line 2" above the low point of the adjacent roof.
- Overflow drains discharge to an approved location and not connected to the roof drain lines. (R903.4.1)

Plywood or Oriented Strand Board Sheathing

- Check for rot or delaminating of existing sheathing or framing.
- Correct span rating based on spacing of rafters or trusses. (R803.2.2)
- Sheathing less than ½" thickness placed over rafters which are spaced more than 20" on center require plywood clips or blocked edges. Typically 7/16" OSB with a span rating of 24/16 is used and will not require clips. (Table R503.2.1.1(1))
- Sheathing exposed to weather (underside of eaves) must have exterior grade glue (marked as "Exterior" or "Exposure 1"). (R803.2.1.1)

- Minimum prescriptive nailing is 8d common nails at 6" on center at supported edges and 12" on center in the field.

Ventilation of Attic or Rafter Bays

- Cross ventilation provided in all attics. (R806)
- Aggregate area of openings shall total 1/150 of the area of the attic. (R806.2 with exceptions)
- When 40% and not more than 50% of openings are in the upper portion at least 3' or greater above level of eave vents, the above ratios can be reduced to 1/300. (R806.2)
- Each enclosed vented rafter or truss bay to have a minimum 1" air space between insulation and underside of roof sheathing, with openings to provide air flow based on the ratio of 1/150 (total area of openings: total area of venting space). (R806.3)
- Insulation cannot block the air flow at vents. (R806.3)
- Unvented attic and unvented enclosed rafter assemblies see R806.5.

Final Inspection

- Proper installation of roof covering. Fasteners installed as required for the type of roofing material and per manufacturer's instructions. (R905)
- Drip edge metal is required at all eaves and gables, extending minimum 0.25 inches below sheathing and extend up the roof deck minimum of 2 inches, Adjacent pieces lapped minimum 2 inches, fastened 12" O.C.
- Flashings to cover all exposed sheathing edges. Proper flashings & counter flashings at chimneys, skylights, roof-to-wall transitions, as required for the type of roofing material and manufacturer's installation instructions. (R905) Flashings must be installed at wall and roof intersections. (R903.2.1)
- Crickets are required on all chimneys 30 inches or wider. Cricket with extend to full width of chimney. R1003.20

Sample Cricket Dimensions

Roof Slope	Cricket Height		
	30 Inch Width	36 Inch Width	48 Inch Width
12 in 12	15 Inches	18 Inches	24 Inches
8 in 12	10 Inches	12 Inches	16 Inches
6 in 12	7 inches	9 inches	12 inches

